IN THE CLAIMS:

1. (previously presented) A system for guiding the resection of a bone during arthroplasty, comprising:

a) anchoring means for anchoring the system to the bone;

b) a resection guide coupled to said anchoring means;

c) means for locating the resection guide relative to the anchoring means, said means for locating providing three degrees of freedom; and

d) a computer navigation system coupled to said resection guide.

2. (original) A system according to claim 1 wherein said computer navigation system is optically coupled to said resection guide.

3. (previously presented) A system according to claim 1 wherein said three degrees of freedom are infinitely adjustable.

4. (previously presented) A system according to claim 1 wherein said anchoring means comprises a pin.

5. (original) A system according to claim 1 wherein said anchoring means has an angled body and a side slot adapted to receive a pin.

6. (original) A system according to claim 1 wherein said three degrees of freedom include two rotations and one translation.

7. (original) A system according to claim 1 wherein said three degrees of freedom include flexion–extension, varus–valgus, and proximal–distal.

8. (previously presented) A system according to claim 1 wherein said resection guide has a guiding slot.

9. (original) A system according to claim 1 wherein

said resection guide includes means for attaching a computer navigation tracker.

10. (original) A system according to claim 1 wherein said resection guide includes a rotatable pin guide.

11. (original) A system according to claim 1 wherein said resection guide includes means for attaching a manual alignment device.

12. (original) A system according to claim 1 further comprising a manual alignment device removably coupled to the resection guide.

13. (original) A system according to claim 12 wherein said manual alignment device includes an alignment handle and an EM rod coupled to said handle.

14. (original) A system according to claim 13 wherein said alignment handle has two ends, one of which is adapted to rest against the distal femur and the other of which is adapted to rest against the proximal tibia.

15. (previously presented) A system according to claim 1 further comprising a plane probe, said plane probe including a planar surface and coupling means for coupling said plane probe to a computer navigation tracker.

16. (previously presented) A system for guiding the resection of a bone during arthroplasty, comprising:

a) anchoring means for anchoring the system to the bone;

b) a resection guide coupled to said anchoring means;

c) means for locating the resection guide relative to the anchoring means, said means for locating providing three degrees of freedom, wherein said anchoring means and said means for locating need not be removed from the bone prior to resection and

d) a computer navigation system coupled to said resection guide.

17. (original) A system according to claim 16 wherein said computer navigation system is optically coupled to said. resection guide.

18. (previously presented) A system according to claim 16 wherein said three degrees of freedom are infinitely adjustable.

19. (original) A system according to claim 16 wherein said three degrees of freedom include two rotations and one translation.

20. (original) A system according to claim 16 wherein said three degrees of freedom include flexion—extension, varus—valgus, and proximal—distal.

21. (original) A system according to claim 16 wherein said resection guide includes means for attaching a computer navigation tracker.

22. (original) A system according to claim 16 wherein said resection guide includes a rotatable pin guide.

23. (original) A system according to claim 16 wherein said resection guide includes means for attaching a manual alignment device.

24. (original) A system according to claim 16 further comprising a manual alignment device removably coupled to the resection guide.

25. (original) A system according to claim 24 wherein said manual alignment device includes an alignment handle and an EM rod coupled to said handle.

26. (original) A system according to claim 25 wherein said alignment handle has two ends, one of which is adapted to

rest against the distal femur and the other of which is adapted to rest against the proximal tibia.

27. (previously presented) A system according to claim 16 further comprising a plane probe, said plane probe including a planar surface and coupling means for coupling said plane to a computer navigation tracker.

28. (previously presented) A system for guiding the resection of a bone during arthroplasty, comprising:

a) anchoring means for anchoring the system to the bone;

b) a resection guide coupled to said anchoring means;

c) means for locating the resection guide relative to the anchoring means, said means for locating providing three degrees of freedom; and

d) a computer navigation system coupled to said resection guide, said system being suitable for use in resecting femurs and tibias.

29. (original) A system according to claim 28 wherein anchoring means further comprises femoral anchoring means and tibial anchoring means.

30. (previously presented) A system according to claim 29 wherein said femoral anchoring means comprises a pin.

31. (previously presented) A system according to claim 29 wherein said tibial anchoring means has an angled body and a side slot adapted to receive a pin.

32. (original) A system according to claim 28 wherein said computer navigation system is optically coupled to said resection guide.

33. (original) A system according to claim 28 wherein said three degrees of freedom are infinitely variable.

34. (original) A system according to claim 28 wherein said three degrees of freedom include two rotations and one translation.

35. (original) A system according to claim 28 wherein said three degrees of freedom include flexion—extension, varus—valgus, and proximal—distal.

36. (original) A system according to claim 28 wherein said resection guide includes means for attaching a computer navigation tracker.

37. (original) A system according to claim 28 wherein said resection guide includes a rotatable pin guide.

38. (original) A system according to claim 28 wherein said resection guide includes means for attaching a manual alignment device.

39. (original) A system according to claim 28 further comprising a manual alignment device removably coupled to the resection guide.

40. (original) A system according to claim 39 wherein said manual alignment device includes an alignment handle and an EM rod coupled to said handle.

41. (original) A system according to claim 40 wherein said alignment handle has two ends, one of which is adapted to rest against the distal femur and the other of which is adapted to rest against the proximal tibia.

42. (previously presented) A system according to claim 28 further comprising a plane probe, said plane probe including a planar surface and coupling means for coupling said plane probe to a computer navigation tracker.

43. (previously presented) A system for guiding the resection of a patient's bone during arthroplasty, said system

comprising a resection guide adapted for guiding a cutting device relative to a patient's bone during arthroplasty, an alignment guide coupled to said resection guide and adapted for attachment to the patient's bone, said alignment guide including a first assembly for positioning said resection guide along a translational path, a second assembly for positioning said resection guide along a first rotational path, and a third assembly for positioning said resection guide along a second rotational path, and a computer navigation system coupled to said resection guide.

44. (previously presented) A system of claim 44, wherein said first and second rotational paths are about different axes.

45. (previously presented) A system of claim 44, wherein said axes are transverse to each other.

46. (previously presented) A system of claim 43, wherein said first, second and third assemblies each include a locking device for securing said resection guide along said translational path and said first and second rotational paths.

47. (previously presented) A system of claim 43, further including an anchoring pin adapted to secure said alignment guide to a patient's bone.

48. (previously presented) A system of claim 43, further including a computer navigation tracker coupled to said resection guide.

49. (previously presented) A system of claim 43, further comprising a plane probe, said plane probe including a planar surface and coupling means for coupling said plane probe to a computer navigation tracker.

50. (previously presented) A system for guiding the resection of a patient's bone during arthroplasty, said system comprising a resection guide adapted for guiding a cutting

device relative to a patient's bone during arthroplasty, an alignment guide coupled to said resection guide and adapted for attachment to the patient's bone, said alignment guide including a first assembly for positioning said resection guide along a translational path and a second assembly for positioning said resection guide along a first rotational path and a second rotational path, and a computer navigation system coupled to said resection guide.

51. (previously presented) A system of claim 50, wherein said first and second rotational paths are about different axes.

52. (previously presented) A system of claim 51, wherein said axes are transverse to each other.

53. (previously presented) A system of claim 50, wherein said first and second assemblies each include a locking device for securing said resection guide along said translational path and said first and second rotational paths.

54. (previously presented) A system of claim 50, further including an anchoring pin adapted to secure said alignment guide to a patient's bone.

55. (previously presented) A system of claim 50, further including a computer navigation tracker coupled to said resection guide.

56. (previously presented) A system according to claim 50, further comprising a plane probe, said plane probe including a planar surface and coupling means for coupling said plane probe to a computer navigation tracker.

57. (currently amended) A system for guiding the resection of a patient's bone during arthroplasty, said system comprising a resection guide adapted for guiding a cutting device relative to a patient's bone during arthroplasty, an alignment guide coupled to said resection guide and adapted for attachment to

the patient's bone, said alignment guide including a first assembly for positioning said resection guide along a translational path and a second assembly for positioning said resection guide along a first rotational path and along a second rotational path, and a computer navigation system coupled to said resection guide.

58. (previously presented) A system of claim 57, wherein said first and second rotational paths are about different axes.

59. (previously presented) A system of claim 58, wherein said axes are transverse to each other.

60. (previously presented) A system of claim 57, wherein said first and second assemblies each include a locking device for securing said resection guide along said translational path and said first and second rotational paths.

61. (previously presented) A system of claim 57, further including an anchoring pin adapted to secure said alignment guide to a patient's bone.

62. (previously presented) A system of claim 57, further including a computer navigation tracker coupled to said resection guide.

63. (previously presented) A system according to claim 57, further comprising a plane probe, said plane probe including a planar surface and coupling means for coupling said plane probe to a computer navigation tracker.

64. (currently amended) A system for guiding the resection of a patient's bone during arthroplasty, said system comprising a resection guide adapted for guiding a cutting device relative to a patient's bone during arthroplasty, an alignment guide adapted for attachment to the patient's bone and adapted for positioning said resection guide along a translational path and

along a plurality of rotational paths, and a computer navigation system coupled to said resection guide.

65. (previously presented) A system of claim 64, wherein said plurality of rotational paths are about different axes.

66. (previously presented) A system of claim 65, wherein said axes are transverse to each other.

67. (previously presented) A system of claim 64, wherein said alignment guide includes first and second assemblies each including at least one locking device.

68. (previously presented) A system of claim 67, wherein said locking device of said first assembly is adapted for securing said resection guide along said translational path.

69. (previously presented) A system of claim 67, wherein said locking device of said second assembly is adapted for securing said resection guide along said plurality of rotational paths.

70. (previously presented) A system of claim 69, wherein said second assembly includes a pair of locking devices, each of said locking devices adapted for securing said resection guide along separate rotational paths.

71. (previously presented) A system of claim 64, further including an anchoring pin adapted to secure said alignment guide to a patient's bone.

72. (previously presented) A system of claim 64, further including a plane probe.

73. (previously presented) A system according to claim 63, further comprising a plane probe, said plane probe including a planar surface and coupling means for coupling said plane probe to a computer navigation tracker.

74. (previously presented) A system for guiding the

resection of a bone during arthroplasty, comprising:

a) a pin for anchoring the system to the bone;

b) a resection guide coupled to said pin;

c) means for locating the resection guide relative to said pin; and

d) a computer navigation system coupled to said resection guide.

75. (previously presented) A system according to claim 74 wherein said means for locating provides three degrees of freedom include two rotations and one translation.

76. (previously presented) A system according to claim 75 wherein said three degrees of freedom include flexion–extension, varus– valgus, and proximal–distal.

77. (previously presented) A system according to claim 74 further comprising a plane probe, said plane probe including a planar surface and coupling means for coupling said plane probe to a computer navigation tracker.

78. (previously presented) A system for guiding the resection of a bone during arthroplasty, comprising:

a) a pin for anchoring the system to the bone;

b) a resection guide coupled to said pin;

c) means for locating the resection guide relative to said pin, wherein said pin and said means for locating need not be removed from the bone prior to resection; and

d) a computer navigation system coupled to said resection guide.

79. (previously presented) A system according to claim 78 wherein said means for locating provides three degrees of freedom include two rotations and one translation.

80. (previously presented) A system according to claim 79 wherein said three degrees of freedom include flexion–extension, varus– valgus, and proximal–distal.

81. (previously presented) A system according to claim 78 further comprising a plane probe, said plane probe including a planar surface and coupling means for coupling said plane to a computer navigation tracker.